CYP26A1 (F27 P6 A1): sc-53618

**BACKGROUND**

The cytochrome P450 proteins (CYPs) are monooxygenases that catalyze many reactions involved in drug metabolism and synthesis of cholesterol, steroids and other lipids. P450 enzymes are classified into subfamilies based on their sequence similarities. CYP26A1, also referred to as retinoic acid-4-hydroxylase, is a major retinoic acid catabolic enzyme. CYP26A1 plays an important role in protecting tailbud tissues from inappropriate exposure to retinoic acid. CYP26A1 transcription is epigenetically regulated by nuclear retinoic acid receptor d2. Mutations in the gene encoding for CYP26A1 are associated with caudal agenesis and spina bifida, imperforate anus, agenesis of the caudal portions of the digestive and urogenital tracts, and malformed lumbosacral skeletal elements. CYP26A1 is upregulated in adenomatous polyposis coli mouse adenomas, human FAP adenomas, human sporadic colon carcinomas, and in the intestine of adenomatous polyposis coli (apcncri) mutant zebrafish embryos.

**CHROMOSOMAL LOCATION**

Genetic locus: CYP26A1 (human) mapping to 10q23.33; Cyp26a1 (mouse) mapping to 19C2.

**SOURCE**

CYP26A1 (F27 P6 A1) is a mouse monoclonal antibody raised against the C-terminus of CYP26A1 of human origin.

**PRODUCT**

Each vial contains 200 µg IgG kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

CYP26A1 (F27 P6 A1) is available conjugated to agarose (sc-53618 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-53618 HRP), 200 µg/ml, for WB, (HCP) and ELISA; to either phycoerythrin (sc-53618 PE), fluorescein (sc-53618 FITC), Alexa Fluor® 488 (sc-53618 AF488), Alexa Fluor® 546 (sc-53618 AF546), Alexa Fluor® 594 (sc-53618 AF594) or Alexa Fluor® 647 (sc-53618 AF647), 200 µg/ml, for WB (RGB), IF, IHQ) and FCM; and to either Alexa Fluor® 680 (sc-53618 AF680) or Alexa Fluor® 790 (sc-53618 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Alexa Fluor® is a trademark of Molecular Probes, Inc., Oregon, USA.

**APPLICATIONS**

CYP26A1 (F27 P6 A1) is recommended for detection of CYP26A1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500).


Molecular Weight of CYP26A1: 49 kDa.

**RECOMMENDED SUPPORT REAGENTS**

To ensure optimal results, the following support reagents are recommended:

1. Western Blotting: use m-IgG BP-HRP: sc-516102 or m-IgG BP-HRP (Cruz Marker); sc-516102-CM (dilution range: 1:1000-1:10000). Cruz Marker™

Molecular Weight Standards: sc-2035, UltraCruz®© Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

2. Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).


**DATA**


CYP26A1 (F27 P6 A1): sc-53618, Immunoperoxidase staining of formalin fixed, paraffin-embedded human liver tissue showing cytoplasmic staining in hepatocytes and bile duct cells at low (A) and high (B) magnification. Kindly provided by The Swedish Human Protein Atlas (HPA) program.

**SELECT PRODUCT CITATIONS**


**STORAGE**

Store at 4° C. **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

**RESEARCH USE**

For research use only, not for use in diagnostic procedures.